



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/752,135	01/06/2004	David E. Francischelli	P-8922.06	3918
27581	7590	05/05/2006	EXAMINER	
MEDTRONIC, INC. 710 MEDTRONIC PARK MINNEAPOLIS, MN 55432-9924			ROLLINS, ROSILAND STACIE	
			ART UNIT	PAPER NUMBER
			3739	

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/752,135 Examiner Rosiland S. Rollins	FRANCISCHELLI ET AL. Art Unit 3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 23 February 2006.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-20 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-20 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date 1/27/06

4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-4, 6, 7, 8, 9, 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitekunas et al. (US 5707369) view of Nagai et al. (US 5172949) AND Stern et al. (US 5443643).**

Vaitekunas et al. disclose a system for assessing transmurrality of an ablation in a tissue comprising: an ablation apparatus (18) operatively adapted to ablate a first side of the tissue, a temperature-sensor (20: col. 2 lines 38-50) operatively adapted to sense temperature along a second side of the tissue, and an output device (col. 2 lines 50-61) in communication with the pad, the output device operatively adapted to indicate the temperature of the tissue. Vaitekunas et al teach all of the limitations of the claims except the temperature sensor being a pad and the pad including a suction opening. Stern et al. disclose a similar device and teach that it is old and well known in the art to provide a temperature sensor pad (figure 6) which, provides a process at a stabilized and controlled temperature so that all areas underneath the pad would be treated in a uniform manner without "hot spots". Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a temperature sensor pad on the Vaitekunas et al. device as taught by Stern et al. to

provide uniform delivery of power without "hot spots". Nagai et al. teach that it is old and well known to include a suction opening on a pad to attract a work piece to the pad. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a suction opening on the pad taught by Stern et al. to attract the tissue to the pad and increase contact area and effectiveness of monitoring.

**Regarding claim 2**, the pad comprises temperature- sensing elements incorporated therein is illustrated in figure 6 if Stern et al.

**Regarding claim 3**, Stern et al. is capable of the temperature of the tissue indicated by the output device corresponding to transmurality of the lesion.

**Regarding claim 4**, the temperature-sensing elements arranged in a grid pattern is illustrated in figure 6 of Stern et al.

**Regarding claims 6 and 7**, an output device including an amplifier for amplifying a signal received from the temperature-sensing pad and a processor for processing a signal received from the temperature-sensing pad is disclosed in column 5 lines 7-42 of Vaitekunas et al.

**Regarding claim 12** the temperature-sensing elements are operatively adapted to be located within the tissue.

**Regarding claim 16** the pad, as illustrated in figure 6 if Stern et al. comprises a conductive element (330) incorporated therein.

**Regarding claims 8 and 9** it would have been obvious to one of ordinary skill in the art at the time the invention was made to select a thermistor or thermocouple as the temperature sensor since it has been held to be within the general skill of a worker in

the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

**Claims 5, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitekunas et al., Stern et al. and Nagai et al. further in view of Chinn (US 5647868).**

Vaitekunas et al. and Stern et al. combined teach all of the limitations of the claims except the output device displaying a representation of the grid pattern. Chinn discloses a similar device that includes a temperature acquisition and data processor center that displays the temperature data so that the operator can easily view the data. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include an output device that displayed a representation of the grid pattern as taught by Chinn, to provide a means of presenting the information to the user in an efficient manner.

**Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitekunas et al., Stern et al. and Nagai et al. further in view of Hoffman (US 4682605).**

Vaitekunas et al. and Stern et al. combined teach all of the limitations of the claims except the temperature-sensing elements being temperature-sensing liquid crystals or are temperature-sensing chemicals. Hoffman discloses that it is old and well known in the art to provide liquid crystals or temperature-sensing chemicals as a temperature sensor on a biofeedback device to provide a detailed temperature resolution over a broad temperature range. Therefore it would have been obvious to

one of ordinary skill in the art at the time the invention was made to provide a temperature-sensing liquid crystal or are temperature-sensing chemical as the temperature sensing element of the Vaitekunas et al. and Stern et al. combined device to enhance the accuracy of the temperature measurement.

**Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitekunas et al. and Stern et al further in view of Zarudiansky (US 4414984).**

Vaitekunas et al. and Stern et al. combined teach all of the limitations of the claims except the pad being mounted on a glove, the pad being formed as a portion of a glove or pad is operatively adapted to be fitted over a finger. Zarudiansky teaches that it is old and well known in the art to provide a temperature-sensing element in the form of a glove to enhance the accuracy of measuring the temperature data. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the temperature sensor of the Vaitekunas et al. and Stern et al. combined device as a glove to enhance the accuracy of measuring the temperature.

***Response to Arguments***

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosiland S. Rollins whose telephone number is (571) 272-4772. The examiner can normally be reached on Mon.-Fri. 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Rosiland S Rollins  
Primary Examiner  
Art Unit 3739

Application/Control Number: 10/752,135  
Art Unit: 3739

Page 7